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(71) Applicant (for all designated States except US): **ABB
TECHNOLOGY AG** [CH/CH]; Affolternstrasse 44,
CH-8050 Zürich (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **RAHIMO, Munaf**
[GB/CH]; Bachweg 10, CH-5619 Uezwil (CH). **LINDER,
Stefan** [CH/CH]; Stöckliackerweg 6, CH-4800 Zofingen
(CH).

(74) Agent: **ABB SCHWEIZ AG**; Intellectual Property (CH-
LC/IP), Brown Boveri Strasse 6, CH-5400 Baden (CH).

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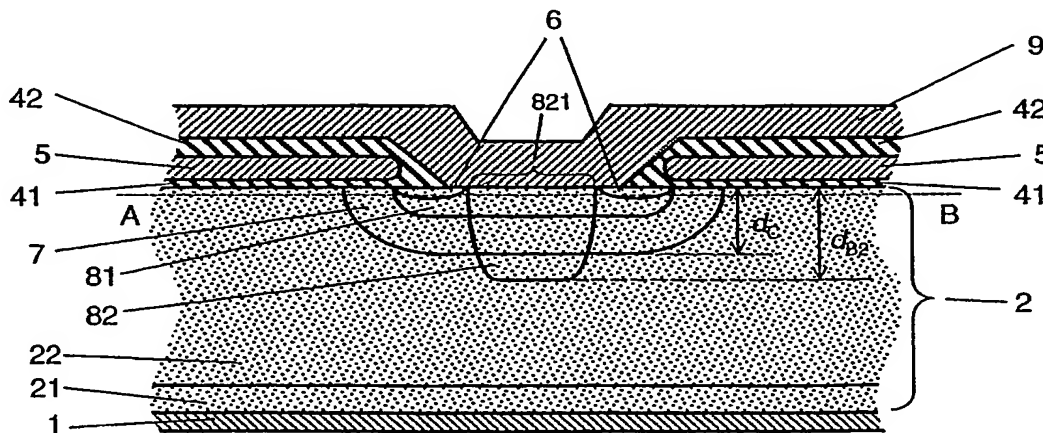
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(54) Title: **IGBT CATHODE DESIGN WITH IMPROVED SAFE OPERATING AREA CAPABILITY**



(57) Abstract: In an insulated gate bipolar transistor, an improved safe operating area capability is achieved according to the inven-
tion by a two-fold base region comprising a first base region (81), which is disposed in the channel region (7) so that it encompasses
the one or more source regions (6), but does not adjoin the second main surface underneath the gate oxide layer (41), and a second
base region (82) is disposed in the semiconductor substrate (2) underneath the base contact area (821) so that it partially overlaps
with the channel region (7) and with the first base region (81).

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